

Application No. 10/608,880

Amendments to the Specification:

[0018] As yet another example, as schematically depicted in FIG. 4, the contiguously adjacent light areas 161-165 can be ~~of~~ darker than the light areas 155 which can be of substantially the same lightness, such that the light areas 161-165 have less reflectance in a reflective system or less transmissivity in a transmissive system. Alternatively, the light areas 161-165 can be lighter than the light areas 155 so as to have greater reflectance in a reflective system or greater transmissivity in a transmissive system. The different lightness and darkness can be achieved by different shades of gray, for example. Also, the light areas 161-165 can have a different pattern or patterns than the light areas 155, such that the light areas 161-165 can have less reflectance (in a reflective system) or transmissivity (in a transmissive system) than the light areas 155, or greater reflectance (in a reflective system) or transmissivity (in a transmissive system) than the light areas 155. In these implementations, the radial heights HA, H1-H5 can be substantially the same.

[0023] The contiguously adjacent light areas 161-165 are more particularly optically different from the light areas 155 which are optically substantially identical, such that the quadrature output waveforms of the quadrature optical encoder sensor 19 (FIG. 1) change in amplitude when the ~~dark~~light areas 161-165 are sensed by the quadrature optical encoder sensor 19. In other words, the light areas 161-165 are configured to modulate the light sensed by the quadrature optical encoder sensor 19 so that the quadrature waveforms change in amplitude. Such change can be detected to indicate a particular angular position of the optical grating 17 (FIG. 1) and thus a particular angular position of the print drum 11 (FIG. 1), for example. Alternatively, a single optically different ~~dark~~light area can be employed

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instead of a plurality of contiguously adjacent optically different darklight areas
161-165.